II.   In the Abstract:

Please amend the Abstract as follows:

Geometric parameters of [the] micro channel aspect ratios are determined for [channels in a micro channel] heat exchangers for gaseous fluids in which micro channels have a surface area density greater than 10000 m^2/m^3 in the alternate situations a) where volume is constant, and b) where volume is variable [and the given aspect ratio is less than or equal to 10 or more than 10] . [The separate methodologies of computational] Computational fluid dynamics and an analytical approach are combined under given constraints [such as pumping power and space limitations and the variables optimized are channel width,] to optimize micro channel aspect ratio and micro channel spacing [. Based on a specification for a heat exchanger, the optimal geometric parameters of a micro channel are obtained] using plots of the performance curves of pressure loss in the channel for the hot side; pressure loss in the channel for the cold side; heat flux; and heat transfer rate [against an axis corresponding to aspect ratio as a basis for a direct determination or further calculation. The optimized dimensions may be compromised to adapt to a defined manufacturing specification] .

AMENDMENT IN RESPONSE TO THE OFFICIAL COMMUNICATION MAILED ON MAY 24, 2005

Inventor FOLI, Kwasi; Serial Number 10/666,263
System for Configuring the Geometric Parameters for a Micro Channel Heat Exchanger ....
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